Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force Date: March 2014

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 3: Advanced PE 0603680F I Manufacturing Technology Program

Technology Development (ATD)

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	-	51.448	41.353	42.772	-	42.772	43.164	46.911	45.763	41.045	Continuing	Continuing
635280: Manufacturing Technologies	-	51.448	41.353	42.772	-	42.772	43.164	46.911	45.763	41.045	Continuing	Continuing

[#] The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

The Manufacturing Technology program executes technical programs to maintain and develop an affordable and reliable industrial base and manufacturing capability that will be responsive to warfighter needs. The program develops and improves manufacturing technologies and processes to enable cost reduction, improve component and system quality, and enhance industrial capability. Value stream modifications and manufacturing throughput improvements are effected to shorten cycle times of weapon systems during design, development, production and sustainment. Manufacturing Technologies objectives are conducted through industrial partnerships which enable the demonstration of manufacturing technologies for existing weapon system upgrades and/or for new warfighter systems. Efforts in the program have been coordinated through the Department of Defense Science and Technology Executive Committee process to harmonize efforts and eliminate duplication. Manufacturing Technologies is in Budget Activity 3, Advanced Technology Development, since it develops and demonstrates manufacturing technologies for existing upgrades and/or new system developments that have military utility and address warfighter needs.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	37.045	41.353	41.444	-	41.444
Current President's Budget	51.448	41.353	42.772	-	42.772
Total Adjustments	14.403	-	1.328	-	1.328
 Congressional General Reductions 	-0.075	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	20.000	-			
Congressional Directed Transfers	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.816	-			
Other Adjustments	-4.706	-	1.328	-	1.328

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 635280: Manufacturing Technologies Congressional Add: Program Increase

FY 2013	FY 2014
18.324	-
10.024	

PE 0603680F: Manufacturing Technology Program

Air Force

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force

Appropriation/Budget Activity
3600: Research, Development, Test & Evaluation, Air Force I BA 3: Advanced Technology Development (ATD)

R-1 Program Element (Number/Name)
PE 0603680F I Manufacturing Technology Program

Congressional Add Details (\$ in Millions, and Includes General Reductions)FY 2013FY 2014Congressional Add Subtotals for Project: 63528018.324-Congressional Add Totals for all Projects18.324-

Change Summary Explanation

C. Accomplishments/Planned Programs (\$ in Millions)

Decrease in FY13 Other Adjustments was due to Sequestration.

Increase in FY13 Congressional Adds for advanced manufacturing technologies.

Increase in FY15 due to emphasis on advanced structures material maturation.

<u></u>	1 1 2010	1 1 2017	1 1 2010
Title: Sustainment Manufacturing Technologies	8.798	12.500	11.880
Description: Develop and implement cost-effective maintenance, repair, and manufacturing technologies for sustainment of Air Force weapon systems.			
FY 2013 Accomplishments: Developed cost effective conventional and low observable production and repair technologies enabling affordable sustainment of aircraft systems. Conducted assessments and developed manufacturing technology to reduce logistics support costs, lead times for high value supply chain commodities, and cycle times for depot repair.			
FY 2014 Plans: Continue development of cost effective conventional and low-observable production and repair technologies to enable affordable sustainment of aircraft systems. Continue assessments and manufacturing technology development to reduce logistics support costs, lead times, and cycle times for depot repair.			
FY 2015 Plans: Continue development of cost effective conventional and low-observable production and repair technologies to enable affordable sustainment of aircraft systems. Continue manufacturing technology development for depot maintenance.			
Title: Advanced Manufacturing Technologies	24.326	28.853	30.892
Description: Develop and transition pervasive affordability and producibility technologies for weapon systems and processes.			
FY 2013 Accomplishments:			

PE 0603680F: Manufacturing Technology Program Air Force

UNCLASSIFIED Page 2 of 4

R-1 Line #25

FY 2013

FY 2014

FY 2015

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force				Date: N	larch 2014	
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 3: Advanced Technology Development (ATD)	R-1 Program Element (Number/I PE 0603680F / Manufacturing Tec	•	ogram			
C. Accomplishments/Planned Programs (\$ in Millions)			FY	2013	FY 2014	FY 2015
Developed and demonstrated rapid response and flexible manufacturing methor processing and supply stream improvements. Demonstrated manufacturing castructures, advanced propulsion technologies, electronics and optics manufacturing the Intelligence, Surveillance and Reconnaissance (C2ISR), space solar cells, and	pabilities for more affordable low-oluring technologies for Command ar	bservable				
FY 2014 Plans: Continue development and demonstration of next generation agile manufacturi processing and supply chain improvements. Continue development and demor affordable and hot structures, advanced propulsion technologies, Air Force multiple for communications, space solar cells, advanced Active Electronically Scanned Wave Infrared optics. Initiate agile manufacturing risk reduction assessments of components.	nstration of manufacturing capabilitions, and electronics manufacturing Array (AESA) sensor applications,	es for more ing technolo and Mid	ogies			
FY 2015 Plans: Continue development and demonstration of manufacturing capabilities for more affordable advanced turbine engine propulsion technologies, communications technologies, advanced Active Electronically Scanned Array (AESA) sensor applications, and Mid-Wave Infrared optics producibility. Continue development of agile manufacturing applications and hot structures affordability and continue to mature advanced material development.			Mid-			
	Accomplishments/Planned Prog	ırams Subt	otals	33.124	41.353	42.772
		FY 2013	FY 2014			
Congressional Add: Program Increase		18.324	-			

	FY 2013	FY 2014
Congressional Add: Program Increase	18.324	-
FY 2013 Accomplishments: Conducted Congressionally-directed effort.		
Congressional Adds Subtotals	18.324	-

D. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

E. Acquisition Strategy

N/A.

PE 0603680F: Manufacturing Technology Program

Air Force

UNCLASSIFIED

Page 3 of 4 R-1 Line #25

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Air Force		Date: March 2014					
Appropriation/Budget Activity 3600: Research, Development, Test & Evaluation, Air Force I BA 3: Advanced Technology Development (ATD)	R-1 Program Element (Number/Name) PE 0603680F / Manufacturing Technology Program						
F. Performance Metrics Please refer to the Performance Base Budget Overview Book for information of Force performance goals and most importantly, how they contribute to our mis		sources are contributing to Air					

PE 0603680F: Manufacturing Technology Program

Air Force Pag